

COPY

REMARKS

This is in response to the Official Action currently outstanding with respect to the above-identified application, which Official Action the Examiner has designated as being FINAL.

Claims 1-24 were present in this application as of the time of the issuance of the currently outstanding Official Action. Claims 1-24 currently stand rejected by the Examiner. By the foregoing Amendment, Applicants have proposed Amendments to Claims 1, 4, 5, and 15-18. Otherwise, no Claims are amended, canceled, added or withdrawn. Accordingly, in the event that the Examiner grants the entry of the foregoing Amendment, Claims 1-24 as hereinabove amended will constitute the claims under active prosecution in this application.

The claims of this application are reproduced above including appropriate status identifiers and showing the Amendments for which entry is sought as required by the Rules.

More specifically, it is noted that in the currently outstanding Official Action, the Examiner has:

1. Not re-acknowledged Applicants' claim for foreign priority under 35 USC §119(a)-(d), and reconfirm that the required certified copies of the priority document have been received by the United States Patent and Trademark Office. – **Applicants respectfully note that the Examiner's acknowledgement and confirmations of these matters appear in the Official Action in this application dated 12 June 2008.**
2. Again objected to the drawings but failed to provide the Applicants with any indication of the basis of that objection – **Applicants suspect that in view of the drawing correction previously submitted in response to the last Official Action in the above-identified application, the Examiner intended to approve the drawings but inadvertently did not remove his indication to the contrary from the Summary Sheet from the last Official Action (apparently revised for use with the currently outstanding FINAL Official Action). Confirmation concerning the acceptability of the drawings in response to this submission, therefore, is respectfully requested.**

COPY

3. Previously acknowledged Applicants' Information Disclosure Statements as filed with the present application and on 28 December 2004, 10 February 2005 and 20 December 2005 and confirmed his consideration of the art listed therein.
4. Rejected Claims 1-15 under 35 USC 112, first paragraph, on the basis of the use of the phraseology "differences between peaks of measurement values and valleys of the measurement values" utilized therein fail to comply with the written description requirement – Applicants by the foregoing Amendment propose to amend Claims 1, 4, 5 and 15 so as to substitute the phraseology "differences between peaks maximum of measurement values and valleys minimum of measurement values" for the phraseology objected to by the Examiner This amendment is supported specifically in the present specification at page 68, line 24 to Page 69, line 1, and is respectfully submitted to overcome the Examiner's outstanding rejection of Claims 1-15 under 35 USC 112. The basis for this belief may be further understood by reference to the attached drawing wherein it is shown that in a case of an aberration distribution as therein depicted the peak is 0.4λ and the valley is -0.2λ such that the P-V value is $0.4\lambda - (-0.2\lambda) = 0.6\lambda$.
5. Rejected Claims 16-20 and 22-23 under 35 USC §102(e) as being anticipated by Ichimura (US Patent No. 6,826,133)
6. Rejected Claims 21 and 24 under 35 USC 103(a) as being unpatentable over the Ichimura reference.

Further comment in these Remarks regarding items 1-4 above is not considered to be necessary in these Remarks.

COPY

Applicants appreciate the Examiner's thorough examination of the subject application and respectfully request entry of the foregoing Amendment After Final Rejection Under 37 CFR 1.116 and reconsideration of the subject application based on the foregoing amendments and the following remarks.

As has been mentioned previously during the present prosecution, the Ichimura reference upon which the Examiner relies in the currently outstanding Official Action corresponds to Japanese Unexamined Patent Application No. Tokukai 2000-11388 that is described as prior art in the present specification. Furthermore, the problems inherent in the Ichimura reference are discussed in the present specification at Page 4, lines 2 to 16 as follows:

Tokukai 2000-11388, a conventional art, has a problem that it is not applicable to discs without prepit signals. In addition, the prepit signal is stored, for example, in sector marks which in general give such a small amount of data that the areas may not be sufficient to enable accurate observation of the magnitude of the correction of the spherical aberration. Moreover, in cases of write once, rewriteable, and other writeable optical discs, if the data derived from the prepit signal is applied to correction for storage areas, accurate correction is likely to be impossible because of, strictly speaking, different storage mechanisms: In prepit areas, recording utilizes the intensity of reflection which decreases when light diffracts in pit sections. In storage areas, recording utilizes the presence/absence of an increase in absorption by storage sections (tint signal).

Furthermore, it is to be noted that Applicants are herein proposing that the claims of this application be amended so as to further distinguish over the Ichimura reference. In particular, the foregoing Amendments emphasize that a reference signal is recorded into a test write area that later is retrieved for use in correction of either the focus offset or the spherical aberration. Therefore, it will be seen that the reference signal is recorded before performing focus offset and spherical aberration correction. On the other hand, however, in the Ichimura reference a prerecorded prepit is used as a reference. Consequently, the Ichimura disclosure cannot be applied to a disc without a prepit.

COPY

Additionally, in the case of write once, rewritable and other writable optical discs, accurate correction using data obtained from prebits is likely to be impossible. This is due to the difference storage mechanics used in prebit areas and storage areas located on the same disc. In particular, recording in prebit areas uses the intensity of reflection, which decreases when light diffracts in the pit sections.

In contrast, recording in storage areas uses the presence/absence of an increasing absorption by the storage sections (tint signal). In the present invention, since the reference signal is first written in a test area, the recording mechanism is the same (or very similar) as the recording mechanism used for the storage areas. As a result, the obtained reference signal better represents the data in the storage area, and allows for more accurate corrections to be made.

With the foregoing additional explanation, Applicants believe that their basis for arguing that data recorded for reference is data recorded before performing focus offset and spherical aberration in their previous response will be better understood. That is, in the Ichimura reference, a prebit is utilized as a reference signal source. Hence, Applicants respectfully submit that this means that the teachings of the Ichimura reference cannot be applied to a disc that does not include a prebit. Accordingly, Applicants also respectfully submit that the teachings, disclosure and/or suggestions of the Ichimura reference are contrary and/or inapposite to the teachings of the present invention as disclosed in the present specification.

Finally, Applicants respectfully again call the Examiner's attention to the fact that the present invention can correct both a spherical aberration and a focus error thereby improving the quality of a reproduction signal. Applicants respectfully submit that this should be compared with the conventional art wherein only one of the spherical aberration and the focus error can be corrected at any given time thereby clearly and distinctly indicating the novel and nonobvious improvements provided by the present invention over the art relied upon by the Examiner.

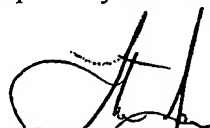
COPY

In view of the above Amendment and Remarks, therefore, Applicants respectfully submit that the Ichimura reference relied upon by the Examiner fails to teach, disclose or suggest all of the features of the present invention specifically set forth in claims 16 to 20 and 22-23 of this application, and consequently cannot be fairly said to render claims 21 and 24 unpatentable given the dependency relationships with allowable claims. Consequently, Applicants respectfully submit that the Ichimura reference is insufficient to teach, disclose or suggest to one of ordinary skill in the art the improvements achieved by the present invention.

Accordingly, Applicants again respectfully submit that the present invention should be recognized to have novelty and to be nonobvious over the references currently at issue. Entry of the foregoing Amendment, reconsideration and allowance of this application as hereinabove amended, therefore, are respectfully requested in response to this communication.

Applicants believe that additional fees are not required in connection with the consideration of this response to the currently outstanding Official Action. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. 04-1105, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

Respectfully submitted,



SIGNATURE OF PRACTITIONER

David A. Tucker

Steven M. Jensen

(type or print name of practitioner)

Attorney for Applicant

Edwards Angell Palmer & Dodge LLP

P. O. Box 55874

P.O. Address

Boston, MA 02205

Date: April 28, 2009

Reg. No. 27,840

Tel. No. (617) 517-5508

Customer No. 21874